

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **18.01.2005**

Applicant's or agent's file reference

**F04-018PCT**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2004/015347**

International filing date (day/month/year)

**12.10.2004**

Priority date (day/month/year)

**16.10.2003**

International Patent Classification (IPC) or both national classification and IPC

**G01N21/65, 21/27, 33/483, 33/543**

Applicant

**KABUSHIKI KAISHA NARD KENKYUSHO**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP 7-174693 A (Hewlett-Packard Co.), 14 July 1995, &amp; EP 0517930 A, &amp; US 5341215 A, &amp; DE 69110032 A</p> <p>Document 2: WO 03/053932 A (Tohru Koike), 3 July 2003 (Family: none)</p> <p>Claims 1 and 2</p> <p>Document 1 cited in the international search report discloses a method for measuring surface plasmon resonance by binding a biologically specific binding substance to a metal thin film, applying a subject sample, and carrying out Raman spectroscopy thereupon (see claims, paragraph [0027], and examples).</p> <p>Document 2 cited in the international search report indicates that compounds such as the compounds represented by formula (I) set forth in the claims of the present application form a biologically specific bond with phosphorus oxides (see claims and examples).</p> <p>Accordingly, a person skilled in the art could easily conceive of using a compound such as a compound represented by formula (I) disclosed in document 2 as the biologically specific binding substance disclosed in document 1.</p>			

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

Therefore, the invention set forth in claims 1 and 2 does not involve an inventive step.

Claims 3 to 5

Using a metal containing a compound represented by formula (I) for the immobilizing layer used in the surface plasmon measurement method set forth in the present claim 1 would be obvious to a person skilled in the art.

Therefore, the invention set forth in claims 3 to 5 does not involve an inventive step.

Claims 6 to 8

The compounds represented by formula (I) disclosed in document 2 are produced from precursors of compounds such as those represented by formula (VII) set forth in the claims of the present application (see document 2, claims, especially claim 11); therefore, the invention set forth in claims 6 to 8 does not involve an inventive step.



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<b>2. Citations and explanations:</b>			
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Claims 3 to 5

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Claims 6 to 8

The compounds represented by formula (I) disclosed in document 2 are produced from precursors of compounds such as those represented by formula (VII) set forth in the claims of the present application (see document 2, claims, especially claim 11); therefore, the invention set forth in claims 6 to 8 does not involve an inventive step.

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Box No. VI

Certain documents cited

1. Certain published documents (Rule 43bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2004-309303 A	04.11.2004	07.04.2003	
JP 2004-294425 A	21.10.2004	22.12.2003	07.03.2003
JP 2004-101409 A	02.04.2004	11.09.2002	
JP 2004-305024 A	04.11.2004	02.04.2003	
EY			

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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